

Commonwealth of Kentucky
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

AIR QUALITY PERMIT

Permittee Name: Stein, Inc.
Mailing Address: 1929 East Royalton Rd. Broadview Heights, Ohio 44147

Source Name: Same as above
Mailing Address: Same as above

Source Location: AK Steel Corp., 69 Armco Road, Ashland, Kentucky 41105

Permit Type: Federally-Enforceable
Review Type: State-Origin

Permit Number: F-00-022 (Revision 2)
Log Number: 54380 (Revision 2), 53774 (Revision 1), 51478 (G699)
(Original)

Application
Complete Date: March 19, 2002 (Revision 2), May 4, 2001 (Revision 1), July
13, 2000 (Original),

Source ID #: 21-019-00107
SIC Code: 3295

Region: Ashland
County: Boyd

Issuance Date: November 14, 2000
Revision Date: May 14, 2003
Expiration Date: November 14, 2005

John S. Lyons, Director
Division for Air Quality

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application which was determined to be complete, the Kentucky Division for Air Quality hereby authorizes the construction and operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in the Regulation 401 KAR 50:035, Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

The primary steel mill, Source ID #: 21-019-00005, and the co-located slag processing plant, Stein, Inc., Source ID #: 21-019-00107, are considered by the Kentucky Division for Air Quality and the US EPA Region IV to be one source as defined in 401 KAR 51:017, Prevention of significant deterioration of air quality (PSD) and 401 KAR 50:035, Permits. Each is responsible and liable for their own violations unless there is a joint cause for the violations.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

01 (01) Grizzly

Description:

The Grizzly separates the slag into a size that can be handled by the crusher. The Grizzly has a maximum rated capacity of 300 tons per hour.

Construction commenced: July 13, 2000

02 (02) Conveyor #1 - 42" Conveyor

Description:

Conveyor #1 has a maximum rated capacity of 340 tons per hour.

Construction commenced: July 13, 2000

03 (03) Crusher

Description:

The crusher has a maximum rated capacity of 40 tons per hour.

Construction commenced: July 13, 2000

04 (04) Conveyor #2 - 30" Conveyor

Description:

Conveyor #2 has a maximum rated capacity of 60 tons per hour.

Construction commenced: July 13, 2000

05 (05) Conveyor #3 - 36" Conveyor

Description:

Conveyor #3 has a maximum rated capacity of 25 tons per hour.

Construction commenced: July 13, 2000

06 (06) 5 x 12 DD Screen

Description:

The 5 x 12 DD screen has a maximum rated capacity of 60 tons per hour.

Construction commenced: July 13, 2000

07 (07) Conveyor # 4 - 42" Conveyor

Description:

Conveyor #4 has a maximum rated capacity of 20 tons per hour.

Construction commenced: July 13, 2000

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

08 (08) Conveyor # 5 - 36" Conveyor

Description:

Conveyor # 5 has a maximum rated capacity of 20 tons per hour.
Construction commenced: July 13, 2000

09 (09) Conveyor # 6 - 36" Conveyor

Description:

Conveyor #6 has a maximum rated capacity of 280 tons per hour.
Construction commenced: July 13, 2000

10 (10) 5 x 12 DD Screen

Description:

The 5 x 12 DD Screen has a maximum rated capacity of 280 tons per hour.
Construction commenced: July 13, 2000

11 (11) Conveyor # 7 - 30" Conveyor

Description:

Conveyor # 7 has a maximum rated capacity of 40 tons per hour.
Construction commenced: July 13, 2000

12 (12) Conveyor # 8 - 42" Conveyor

Description:

Conveyor # 8 has a maximum rated capacity of 140 tons per hour.
Construction commenced: July 13, 2000

13 (13) Conveyor # 9 - 30" Conveyor

Description:

Conveyor #9 has a maximum rated capacity of 140 tons per hour.
Construction commenced: July 13, 2000

14 (14) 6 x 16 TD Screen

Description:

The 6x16 TD Screen has a maximum rated capacity of 140 tons per hour.
Construction commenced: July 13, 2000

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

15 (15) Conveyor # 10 - 42" Conveyor

Description:

Conveyor # 10 has a maximum rated capacity of 32 tons per hour.
Construction commenced: July 13, 2000

16 (16) Conveyor # 11 - 30" Conveyor

Description:

Conveyor # 11 has a maximum rated capacity of 100 tons per hour.
Construction commenced: July 13, 2000

17 (17) Conveyor # 12 - 24" Conveyor

Description:

Conveyor # 12 has a maximum rated capacity of 32 tons per hour.
Construction commenced: July 13, 2000

18 (18) Conveyor # 13 - 24" Conveyor

Description:

Conveyor # 13 has a maximum rated capacity of 48 tons per hour.
Construction commenced: July 13, 2000

19 (19) Conveyor # 14 - 36" Conveyor

Description:

Conveyor # 14 has a maximum rated capacity of 60 tons per hour.
Construction commenced: July 13, 2000

(20) Haul Roads

Description:

Haul roads are unpaved from the slag dump pit near the furnace to the slag processing facilities.
Construction commenced: July 13, 2000

(21) Front Endloader

Description:

The front endloader is used to transport and transfer the slag from the steel plant to the grizzly.
Construction commenced: July 13, 2000

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(22) Raw Slag Trucks and Customer Trucks

Description:

The raw slag trucks and customer trucks are used to transport the slag from the site.
Construction commenced: July 13, 2000

(23) Hopper/Feeder

Description:

A portable hopper/feeder processes slag chips at a maximum rate of 300 tons per hour.
Construction commenced: May 4, 2001

APPLICABLE REGULATION:

401 KAR 63:010, Fugitive Emissions

1. Operating Limitations:

None

2. Emission Limitations:

The permittee shall take reasonable and necessary precaution to prevent particulate matter from becoming airborne. Such reasonable precautions shall include the following:

- (a) Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces which can create airborne dusts;
- (b) The use of water sprays or other measures to suppress the dust emissions during handling.
- (c) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;
- (d) The maintenance of paved roadways in a clean condition;
- (e) The prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water.

In accordance to 401 KAR 63:010, Section 3, (2), visible fugitive dust emissions shall not be discharged beyond the lot line of the property.

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall maintain a record of watering practices. This record shall include date and time of watering and the components included in the water mixture if applicable.

6. Specific Reporting Requirements:

None

SECTION C - GENERAL CONDITIONS

A. Administrative Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be (a) violation(s) of State Regulation 401 KAR 50:035, Permits, Section 7(3)(d) and is grounds for an enforcement action including but not limited to the termination, revocation and re-issuance, or revision of this permit.
2. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 50:035 Section 12]
3. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [401 KAR 50:035 Section 7(3)(k)]
4. The permit contained herein may be revised, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for any permit revision, revocation, re-issuance, or termination, or of a notification of a planned change or anticipated noncompliance shall not stay any permit condition. [401 KAR 50:035 Section 7(3)(f)]
5. The permit does not convey property rights or exclusive privileges. [401 KAR 50:035 Section 7 (3)(g)]
6. The permit shall be subject to suspension at any time the permittee fails to pay all fees within 90 days after notification as specified in State Regulation 401 KAR 50:038, Air emissions fee. [401 KAR 50:035 Section 7(3)(h)]
7. Nothing in this permit shall alter or affect the authority of the U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR 50:035 Section 8(3)(a)]
8. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 50:035 Section 8(3)(b)]
9. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR 50:035 Section 7(2)(b)5]

SECTION C - GENERAL CONDITIONS (CONTINUED)

B. Recordkeeping Requirements

1. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [401 KAR 50:035 Section 7(1)(d)2 and 401 KAR 50:035 Section 7(2)(c)]
2. The permittee shall perform compliance certification and record keeping sufficient to assure compliance with the terms and conditions of the permit. Documents, including reports, shall be certified by a responsible official pursuant to State Regulation 401 KAR 50:035, Permits, Section 6.

C. Reporting Requirements

1.
 - a. In accordance with the provisions of Regulation 401 KAR 50:055, Section 1 the owner or operator shall notify the Division for Air Quality's Ashland Regional Office concerning startups, shutdowns, or malfunctions as follows:
 - i. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - ii. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.
 - b. In accordance with the provisions of Regulation 401 KAR 50:035, Section 7(1)(e)2, the owner or operator shall promptly report deviations from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Reporting Requirement condition 1 a) above) to the Division for Air Quality's Ashland Regional Office.
2. The permittee shall furnish to the Division, in writing, information that the Division may request to determine whether cause exists for modifying, revoking, reissuing, or terminating this permit, or to determine compliance with this permit. [401 KAR 50:035, Section 7(2)(b)3e and 401 KAR 50:035 Section 7(3)(j)]

SECTION C - GENERAL CONDITIONS (CONTINUED)

3. Summary reports of any monitoring required by this permit shall be submitted to the Division's Ashland Regional Office at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.

The reports are due within 30 days after the end of each six month reporting period which commences on the initial issuance date of this permit. The permittee may shift to semi-annual reporting on a calendar year basis upon approval of the regional office. If calendar year reporting is approved, the semi-annual reports are due January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to Section 6(1) of Regulation 401 KAR 50:035, Permits. All deviations from permit requirements shall be clearly identified in the reports.

D. Inspections

1. In accordance with the requirements of Regulation 401 KAR 50:035, Permits, Section 7(2)(c) the permittee shall allow the Cabinet or an authorized representative to perform the following:
 - a. Enter upon the premises where a source is located or emissions-related activity is conducted, or where records are kept;
 - b. Have access to and copy, at reasonable times, any records required by the permit:
 - i. During normal office hours, and
 - ii. During periods of an emergency when prompt access to records is essential to proper assessment by the Cabinet;
 - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times shall include, but are not limited to the following:
 - i. During all hours of operation at the source,
 - ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii. During an emergency; and
 - d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements. Reasonable times shall include, but are not limited to the following:
 - i. During all hours of operation at the source,
 - ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii. During an emergency.

SECTION C - GENERAL CONDITIONS (CONTINUED)

E. Emergencies/Enforcement Provisions

1. The permittee shall not use as defense in an enforcement action, the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [401 KAR 50:035 Section 7(3)(e)].
2. Pursuant to State Regulation 401 KAR 50:035, Permits, Section 9, an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency if the notice met the requirement of State Regulation 401 KAR 50:035, Permits, Section 7(1)(e)2, and included a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
3. Emergency provisions listed in General Condition E.2 are in addition to any emergency or upset provision contained in an applicable requirement.
4. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 50:035 Section 9(3)].

F. Compliance

1. Permit Shield - Except as provided in State Regulation 401 KAR 50:035, Permits, compliance by the affected facilities listed herein with the conditions of this permit shall be deemed to be compliance with all applicable requirements identified in this permit as of the date of the issuance of this permit.
2. Periodic testing or instrumental or non-instrumental monitoring, which may consist of record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstration of continuing compliance with the conditions of this permit. For the purpose of demonstration of continuing compliance, the following guidelines shall be followed:
 - a. Pursuant to State Regulation 401 KAR 50:055, General compliance requirements, Section 2(5), all air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation at any time an affected facility for which the equipment and measures are designed is operated, except as provided by State Regulation 401 KAR 50:055, Section 1.

SECTION C - GENERAL CONDITIONS (CONTINUED)

- b. A log of the monthly raw material consumption and monthly production rates shall be kept available at the source. Compliance with the emission limits may be demonstrated by computer program (spread sheets), calculations or performance tests as may be specified by the Division.
- 3. Pursuant to Regulation 401 KAR 50:035, Permits, Section 7(2)(b), the permittee shall annually complete and return a Compliance Certification Form (DEP 7007CC) to the Division's Ashland Regional Office in accordance with the following requirements:
 - a. Identification of each term or condition of the permit that is the basis of the certification;
 - b. The compliance status regarding each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent; and
 - d. The method used for determining the compliance status for the source, currently and over the reporting period, pursuant to 401 KAR 50:035, Section 7(1)(c),(d), and (e).
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
 - f. The certification shall be postmarked by the thirtieth (30) day following the applicable permit issuance anniversary date, or by January 30th of each year if calendar year reporting is approved by the regional office. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Ashland Regional Office
1550 Wolohan Drive, Suite 1
Ashland, Kentucky 41102-8942

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, Kentucky 40601

SECTION C - GENERAL CONDITIONS (CONTINUED)

G. Construction Requirements:

For Emission Points 10,11,19,23:

1. Pursuant to State Regulation 401 KAR 50:035, Permits, Section 13(1), unless construction is commenced on or before 18 months after the date of issue of this permit, or if construction is commenced and then stopped for any consecutive period of 18 months or more, then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Extensions of the time periods specified herein may be granted by the Division upon a satisfactory request showing that an extension is justified.
2. Pursuant to State Regulations 401 KAR 50:035, Permits, Section 7(2)(d) and 401 KAR 59:005, General provisions, Section 3(1), within 30 days following construction commencement, within 15 days following start-up and attainment of maximum production rate, or within 15 days following the issuance date of this permit, whichever is later, the owner and/or operator of the affected facilities specified on this permit shall furnish to the Division's Ashland Regional Office, with a copy to the Division's Frankfort Central Office, the following:
 - a. Date when construction commenced, (See General Condition G.1).
 - b. Start-up date of each of the affected facilities listed on this permit.
 - c. Date when maximum production rate was achieved, (See General Condition G.3.b).
3.
 - a. Pursuant to State Regulation 401 KAR 59:005, General provisions, Section 2(1), this permit shall allow time for the initial start-up, operation and compliance demonstration of the affected facilities listed herein. However, within 60 days after achieving the maximum production rate at which the affected facilities will be operated, but not later than 180 days after initial start-up of such facilities, the owner or operator shall demonstrate compliance to a duly authorized representative of the Division.
 - b. Pursuant to State Regulation 401 KAR 59:005, General provisions, Section 3(1)(b), unless notification and justification to the contrary are received by this Division, the date of achieving the maximum production rate at which the affected facilities will be operated shall be deemed to be 30 days after initial start-up.
4. Operation of the affected facilities authorized by this permit shall not commence until compliance with applicable standards specified herein has been demonstrated in accordance with the requirements of State Regulation 401 KAR 50:035, Permits, Section 13(4).